

# NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION

## LAKE TROPHIC DATA

### MORPHOMETRIC:

LAKE <u>Pratt pond</u>	LAKE AREA (HA) <u>12.42</u>
TOWN <u>New Ipswich</u>	MAXIMUM DEPTH (M) <u>2.7</u>
COUNTY <u>Hillsborough</u>	MEAN DEPTH (M) <u>2.1</u>
RIVER BASIN <u>Merrimack</u>	VOLUME (M <sup>3</sup> ) _____
LATITUDE <u>42° 44' N</u>	MUD SURFACE AREA (HA) _____
LONGITUDE <u>71° 54' W</u>	RELATIVE DEPTH _____
ELEVATION (FT) <u>1235</u>	SHORE CONFIGURATION _____
SHORE LENGTH (M) <u>1800</u>	AREAL WATER LOAD (M/YR) _____
WATERSHED AREA (HA) _____	FLUSHING RATE (YR <sup>-1</sup> ) _____
% WATERSHED PONDED _____	PHOSPHORUS RETENTION COEFF. _____

### BIOLOGICAL:

DATE	29 JAN 1985	
DOM. PHYTOPLANKTON (% total) <sup>1</sup>	Dinobryon (65%)	
<sup>2</sup>		
NUMBER OF ALGAL GENERA	6	
SPECIES DIVERSITY	1.83	
CHLOROPHYLL <u>a</u> (ug/L)		
DOM. ZOOPLANKTON (% total) <sup>1</sup>	Calanoid copepod (85%)	
<sup>2</sup>		
ROTIFERS/LITER	4	
MICROCRUSTACEA/LITER	126	
TOTAL ZOOPLANK. CNTS (cells/L)	130	
VASCULAR PLANT ABUNDANCE		
DOMINANT VASCULAR PLANTS <sup>1</sup>		
<sup>2</sup>		
<sup>3</sup>		
SECCHI DISK TRANSPARENCY (M)		
BOTTOM DISS. OXYGEN (mg/L)	11.9	
SEDIMENT: % ORGANIC MATTER		

LAKE TYPE: An artificial pond.

SUMMER THERMAL STRATIFICATION: YES \_\_\_\_\_ NO \_\_\_\_\_ WEAK \_\_\_\_\_

IF YES, VOLUME OF HYPOLIMNION \_\_\_\_\_ (m<sup>3</sup>) THERMOCLINE DEPTH \_\_\_\_\_ (m)

<u>CHEMICAL:</u> (mg/L unless indicated otherwise)		LAKE: Pratt Pond				
	WINTER		SUMMER			
DATE	29 JAN 1985					
DEPTH (M)	1.0					
pH (UNITS)	5.2					
ALKALINITY (I. P.)	0.3					
ALKALINITY (F.E.P.)	1.9					
NITRITE+NITRATE NITROGEN						
TOTAL KJELDAHL NITROGEN						
TOTAL PHOSPHORUS	0.005					
SPEC. CONDUCT. ( $\mu$ Mhos/cm)	31.9					
APPARENT COLOR (UNITS)	0					
TRUE COLOR (440 nm)(UNITS)	6					
MAGNESIUM						
CALCIUM						
SODIUM						
POTASSIUM						
CHLORIDE						
TN : TP						
INORG-N : INORG-P						
[Mg+Ca] : [Na+K]						
CALCITE SATURATION INDEX						
* = NOT DEFENSIBLE      NR = NO RESULT						
<u>TROPHIC CLASSIFICATION:</u> _____						
		D.O.	S.D.	PLANT ABUND.	TOTAL CHL a PTS.	TROPHIC CLASS.
CLASSIFICATION POINTS:						PRIVATE
<u>COMMENTS:</u>						
1. This is a private, man-made pond, with no public access. It was not sampled during the summer because of no boat access, but a winter sample was collected.						
2. A plant survey was conducted in early fall, 1977, and in early summer, 1978, in response to a complaint. At that time, plants were common to abundant. Pipewort was abundant, with masses of the filamentous green alga <i>Mougeotia</i> clinging to its stems. Yellow water lily and water milfoil were also common.						